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| EXAMINER | |
|---|---|
| NGUYEN, HUY THANH | |
| **ART UNIT** | **PAPER NUMBER** |
| 2616 | |

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/746,615 | KASAI, KAZUHIRO | |
| | Examiner | Art Unit | |
| | HUY T NGUYEN | 2616 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Squilla et al (5,898,779) in view of Shiota et al 6,625,334).

Regarding claim 1, Squilla discloses an image processing apparatus for processing an image in accordance with property information for defining an image processing method for processing image data of the image, comprising:

inputting means for inputting the image data, key information (private key or/and public key information ) used for recognizing alteration of the image (column 8, ;lines

10-20) data and the property information (photographer information , column 5, lines 60-68) ;

judging means for judging from the image data and the key information input by said inputting means whether the image data was altered (column 8, lines 10-20); and

controlling means for controlling an execution of the image processing method in accordance with a judgment by said judging means and the property information (column 8, lines 10-20).

Squilla fails to specifically teach using property information for processing the image .

Shiota teaches a recording apparatus for having means for adding property information with the image and using the property information as means fore executing a processing method of the image (column 2, lines 38 column 3, line 30, column 5 lines 1-10) .

It would have been obvious to one of ordinary skill in the art to modify Squilla with Shiota by providing the image with property information and using the property information for executing the processing of the image thereby reduce the labor and time in processing the image .

Method claim 7 corresponds to apparatus claim 1. Therefore method claim 7 is rejected by the same reason as applied to apparatus claim 1.

Regarding claim 2. An image processing apparatus according to claim 1, Squilla as modified with Shiota further teaches further comprising an interface for accessing a detachable memory wherein the image data, the key information and the property

information are stored in the detachable memory (28)(See Squilla ,column 10 lines 38-65, Shiota , Fig. 1, column 3) .

Regarding claim 3, Squilla as modified with Shiota further teaches . An image processing apparatus according to claim 1, wherein the property information defines the image processing method used for executing printing output (See Shiota Fig 2, column 5).

Regarding claim 4, Squilla as modified with Shiota further teaches 4. An image processing apparatus according to claim 1, wherein the property information defines contents of the control to be executed by said controlling means in accordance with the judgment by said judging means9 See Squilla column 8, line 10-20, Shiota column 5.

Regarding claim 5, Squilla further teaches 5. An image processing apparatus according to claim 1, wherein the image data input by said inputting means includes a digital signature, the key information key information used for the digital signature, and said image processing apparatus further comprises digital signature decrypting means for decrypting the digital signature by using the key information (column 7, lines 20-30, 60-68, column 8, lines 10-20).

Regarding claim 6, Squilla further teaches .. An apparatus according to claim 5, wherein said Judging means executes a judgment process by comparing information obtained by calculating the image data in a predetermined manner with information obtained by said digital signature decrypting means (column 7, lines 20-30, 60-68, column 8, lines 10-20).

Method claim 7, corresponds to apparatus claim 1. Therefore, method claim 7 is rejected by the same reason as applied to apparatus claim 1.

Regarding claim 8 , Squilla as modified with Shiota teaches 8. A storage medium storing processor- implementable instructions for controlling a processor to carry out the method on Claim 7 since Squilla and Shiota teach using processor and computer using preset instruction to execute the apparatus for performing the method of claim 47.

3. Claims 9,10 and 18,19, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (5,623,637) in view of Squilla et al (5,898,779) and Shiota et al (6,625,334) .

Regarding claim 9, Jones teaches a processing system with an interface capable of accessing a memory medium (Figs.3, column2 and 9) comprising:
information reading means for reading a digital signature of file data stored in the memory medium, a secret key used for the digital signature, or a public key paired to the secret key, together with the image file data; and

output controlling means for outputting the data in accordance with information read by said information reading means.

Jones fails to specifically teach that the data is image data

Squilla teaches a memory for storing an image file with additional information including digital signature .

It would have been obvious to one of ordinary skill in the aft to modify Jones with Squilla by using the teaching of Squilla for storing the image file as an alternative to the data file of Jones .

Jones as modified with Squilla fails to specifically teach using property information for processing the image .

Shiota teaches a recording apparatus for having means for adding property information with the image and using the property information as means fore executing a processing method of the image (column 2, lines 38 column 3, line 30, column 5 lines 1-10) .

It would have been obvious to one of ordinary skill in the art to modify Squilla with Shiota by providing the image with property information and using the property information for executing the processing of the image thereby reduce the labor and time in processing the image .

Method claim 18 corresponds to apparatus claim 9. Therefore method claim 18 is rejected by the same reason as applied to apparatus claim 9.

Regarding claims 10 and 19, Squilla as modified with Shiota further teaches. An image processing system according to claim 9, further comprising digital signature decrypting means for decrypting the digital signature of the image file data read by said information reading means by using the public key (See Squilla, column 7, lines 2-20,column 8, lines 2-20).

Regarding claim 28, Jones as modified with Squilla and Shiota further teaches a storage medium storing processor- implementable instructions for controlling a

processor to carry out the method on Claim 18 (See Jones , Fig 3, Squilla Figs. 5 and 6).

4. Claims 11, 12,20,21 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al in view of Squilla et al (5,898,779) and Shiota et al 6,625,334) as applied to claims 9 and 18 above, further in view of Yoshimura et al (6,131,162).

Regarding claims 11 and 20 Squilla fails to specifically teach a calculating means for calculating an image file specific value obtained from the image file data by using one-way function.

Yoshimura teaches a calculating means for calculating a specific value by using one -way -function (column 2).

It would have been obvious to one of ordinary skill in the art to modify Squilla with Yoshimura by using one -way- function calculating means as taught by Yoshimura for calculating a specific value as an alternative method for authenticating of the image data.

Regarding claims 12 and 21, Jones as modified with Squilla and further comprising image file data examining means for examining the image file data in accordance with a data value obtained by said digital signature decrypting means and the value obtained by the calculating means (See Squilla ,column 8, lines 2-20, Yoshimura column 2).

Regarding claim 25, Jones as modified with Squilla and Yoshimura further teaches the secret key for decrypting the value calculated by said calculating means is an apparatus specific secret key (See Yoshimura column 2).

Regarding claim 26, Jones as modified with Squilla and Yoshimura further teaches further comprising secret key generating means for newly generating a secret key for decrypting the value calculated by said calculating means, in accordance with a user definition (See Yoshimura column 2).

5. Claims 13,22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (5,623,637) in view of Squilla et al (5,898,779) , Shiota et al 6,625,334) and Sono (5,829,044).

Regarding claim 13, Jones an image processing system with an interface capable of accessing a memory medium comprising:

information reading means, responsive to a detection of the connection of the memory medium by said memory medium detecting means for reading a digital signature of file data stored in the memory medium, a secret key used for the digital signature, or a public key paired to the secret key together with the image file data and property information for defining an image processing method for processing image data (Fig. 3 column 2 column 9); and

image output controlling means for outputting data in accordance with information read by said information reading means.

Jones fails to specifically teach that the data is image data

Squilla teaches a memory for storing an image file with additional information including digital signature .

It would have been obvious to one of ordinary skill in the aft to modify Jones with Squilla by using the teaching of Squilla for storing the image file as an alternative to the data file of Jones .

Jones as modified with Squilla fails to specifically teach using property information for processing the image .

Shiota teaches a recording apparatus for having means for adding property information with the image and using the property information as means fore executing a processing method of the image (column 2, lines 38 column 3, line 30. column 5 lines 1-10) .

It would have been obvious to one of ordinary skill in the art to modify Squilla with Shiota by providing the image with property information and using the property information for executing the processing of the image thereby reduce the labor and time in processing the image .

Jones as modified with Squilla and Shiota fails to specifically teach a control means for detecting a connection between a memory and an interface .

Sono teaches a control mean for detecting a connection between a memory and an interface and enabling a transmission of the data between the memory and the interface when a connection is determined (column 6, lines 27-32).

It would have been obvious to one of ordinary skill in the art to modify Jones with Sono by using a control means as taught by Sono with Jones apparatus for

detecting a connection between the memory and the interface thereby enhancing the function of the system to prevent error in transmission of data between the memory and interface.

Method claim 22 corresponds to apparatus claim 13. Therefore method claim 22 is rejected by the same reason as applied to apparatus claim 13.

Regarding claim 29, Squilla as modified with Shiota 29. A storage medium storing processor- implemental instructions for controlling a processor to carry out the method on Claim 22 since Jones , Squilla and Shiota teach using a processor for carryout the method of claim 22.See Squilla Figs.5, 6, Shiota .

6. Claims 14 ,16,17,23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al in view of Squilla et al (5,898,779) and Yoshimura et al (6,131,162).

Regarding claim 14, Jones discloses a processing system with an interface capable of accessing a memory medium (Fig. 3, column 2, lines 30-50, column 9) comprising:

data file generating means for generating file data to be stored in the memory medium;

file data storing means for storing the image file data generated by said image file data generating means in the memory medium;

digital signature generating means for generating the digital signature by said calculating means by using a secret key stored in the memory medium.

Jones fails to specifically teach that the data file is an image file data .

Squilla teaches a memory for storing an image file with additional information including digital signature .

It would have been obvious to one of ordinary skill in the aft to modify Jones with Squilla by using the teaching of Squilla for storing the image file as an alternative to the data file of Jones .

Jones as modified with Squilla fails to teach using on way function to calculate a specific value and generating digital signature using secret key .

Yoshimura teaches a control means using one way function for calculating a specific value obtained from the image file data and generating a digital signature by decrypting the calculated value and the secret key (column 2, lines 10-25).

It would have been obvious to one of ordinary skill in the art to modify Squilla with Yoshimura by using a control means as taught by Yoshimura with Squilla apparatus for generating digital signature as an alternative to the method of generating digital signature of Squilla.

Method claim 23 corresponds to apparatus claim 14. Therefore, method claim 23 is rejecter by the same reason as applied to apparatus claim 14.

Regarding claim 16 , Jones as modified with Squilla and Yoshimura further teaches the secret key for decrypting the value calculated by said calculating means is an apparatus specific secret key (See Yoshimura column 2).

Regarding claim 17 , Jones as modified with Squilla and Yoshimura further teaches further comprising secret key generating means for newly generating a secret

key for decrypting the value calculated by said calculating means, in accordance with a user definition (See Yoshimura column 2).

Regarding claim 30, Jones as modified with Squilla and Yoshimura further storage medium storing processor- implementable instructions for controlling a processor to carry out the method on Claim 23 since Jones , Squilla and Yoshimura teach using a processor for carrying put the method of claim 23 (See Jones Fig. 3, Squilla Fig 6, Yoshimura , Figs. 4-6).

7. Claims 15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (5,623,637) in view of Squilla et al (5,898,779) and Yoshimura as applied to claim 14 and 23 above, further in view of Shiota et al 6,625,334).

Jones as modified with Squilla further teaches storing signature data in an area of the medium (See Jones, Fig. 3 and Squilla column 7 lines 5-60) but fails to specifically teach using property information for processing the image .

Shiota teaches a recording apparatus for having means for adding property information with the image and using the property information as means for executing a processing method of the image (column 2, lines 38 column 3, line 30).

It would have been obvious to one of ordinary skill in the art to modify Jones as modified with Squilla with Shiota by using property information providing means as taught by Shiota for providing the image with property information thereby properly processing the image when needed .

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al (5,623,637) in view of Squilla et al (5,898,779) and Shiota et al 6,625,334).

Regarding claim 27, Jones e a (5,623,67) a teaches a memory card (Fig. 3 column 2, column 9, Abstract) storing:

data file;

digital signature information of said image data file;

secret key information used for the digital signature; and

public key information paired to said secret key;

Jones fails to specifically teach the data file is image file .

Squilla teaches a memory for storing a image file with additional information including digital signature .

It would have been obvious to one of ordinary skill in the aft to modify Jones with Squilla by using the teaching of Squilla for storing the image file as a alternative to the data file of Jones .

Jones as modified with Squilla fails to teach storing property information for defining an image processing method .

Shiota teaches a memory storing the image with property information defining an image processing method for processing image data (column 2, line 38 to column 3, line 30, column 5 lines 1-10) . It would have bee obvious to one of ordinary skill in the art to modify Jones as modified with Squilla with Shiota by providing the memory card of Jones as modified with Squilla with property information as taught by Shiota in order to properly process the image data file when needed .

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY T NGUYEN whose telephone number is (571) 272-7378. The examiner can normally be reached on 8:30AM -6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (571) 272-7375. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

H.N

HUY NGUYEN
PRIMARY EXAMINER